MEMORANDUM FOR: DD

Ed - Remember this?

An updated version would be helpful for CORE and be of general interest to no, besides, us?

J

Date 6/13

FORM 5-75 101 USE PREVIOUS EDITIONS

3/ODP

For use at DCI's Retreat 18-19 May 1979:

1. Manning and resource levels of DDA Offices plotted against some measure of their productivity for the past five years.

2. Examples of new missions assigned, assumed or inherited by DDA Offices during the past five years with no increase in resouces.

3. Examples of problems identified in audit and task force studies which require additional resources to solve - but no resources were available or provided.

4. List of specific current R&D projects that are being pursued by S&T at the request of DDA Offices.

5. Examples of vital/critical programs that cannot be pursued because of constrained resources.

NOTE: I don't want people working overtime to assemble ~~in~~ info - I want factual info that is readily available.

D/ODP

18 MAY 1979

1. Manning and resource levels of DDA Offices plotted against some measure of their productivity for the past five years.

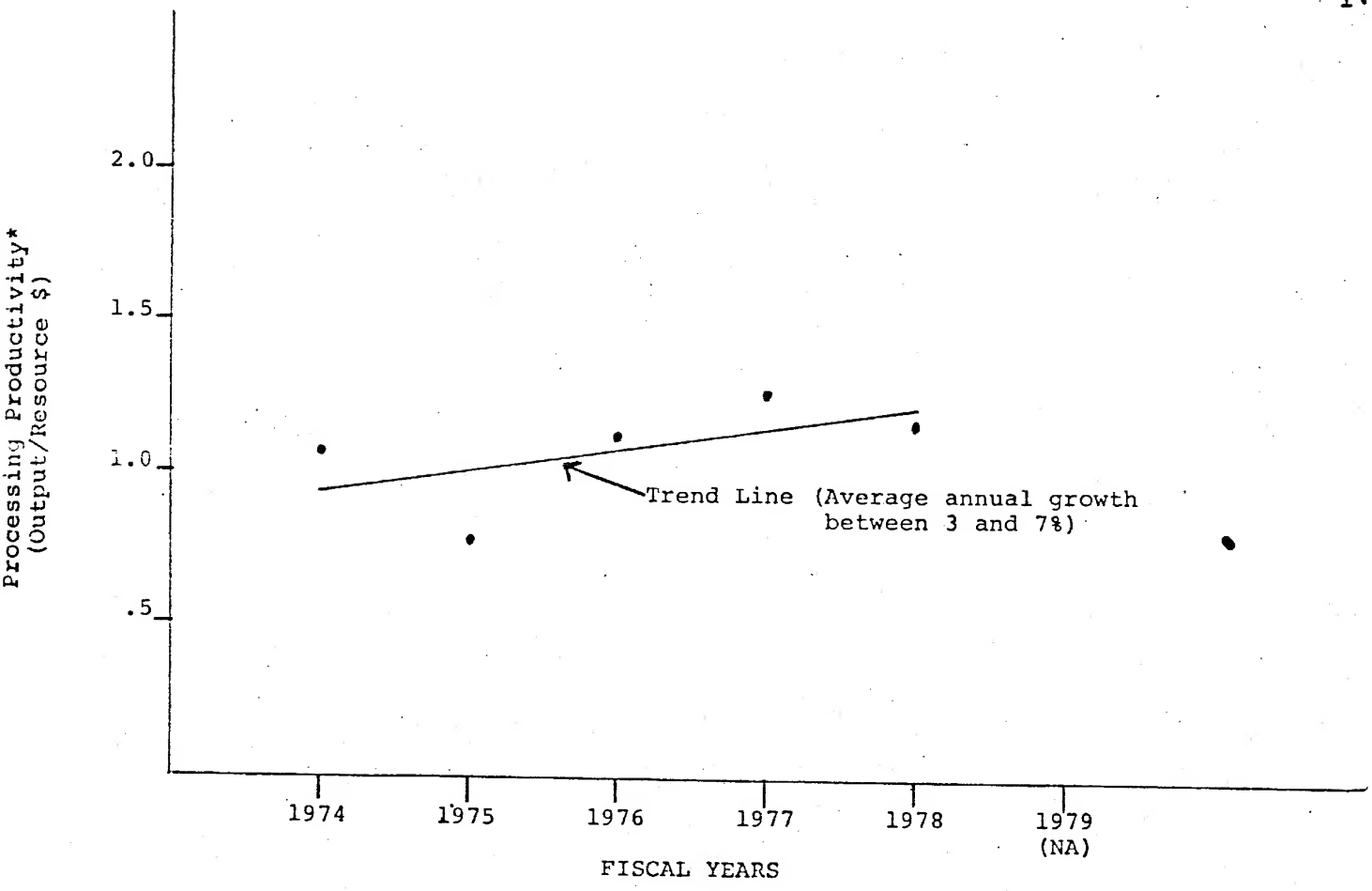
The attached two charts are an experimental attempt to measure the productivity of ODP Processing services (i.e., computer services as distinct from applications development services). Processing "output" is measured by units of computer service which are derived from ODP Project Activity Report (PAR) "Dollars". (PAR "dollars" are a relatively consistent measure over time of computer work performed). Manning and resource levels have been estimated as ODP average employment levels (minus Applications personnel) and ODP Budget (minus applications development dollars from PAR) respectively.

Processing productivity in computer service output per dollar shows a slightly increasing trend (3-7% annually). The productivity per staff member is increasing more dramatically at an estimated rate of between 18 and 22%.

At this time, output measures are not available for estimating applications development productivity. ODP does not collect some of the traditional measures, such as lines of code produced. The utility of a measure like lines of code is a subject of controversy.

ODP PROCESSING PRODUCTIVITY (Output/Resource $)*

17 MAY 1979



*Processing Productivity = Project Activity Report Units of Computer Service ÷ Processing $
(Output/Resource $) (See Note)

17 May 1979

NOTE TO PROCESSING PRODUCTIVITY

(OUTPUT/RESOURCE $) CHART

For the purpose of this chart, the following definitions were used.

Processing Productivity is estimated as:

$$\frac{\text{Computer Service Output (millions of units)}}{\text{Processing Dollars (in millions)}}$$

where,

Computer Service Output is measured by:

Project Activity Report (PAR) Units of Computer Service (in millions). (In the PAR referred to as millions of Billable Computer Service dollars.)

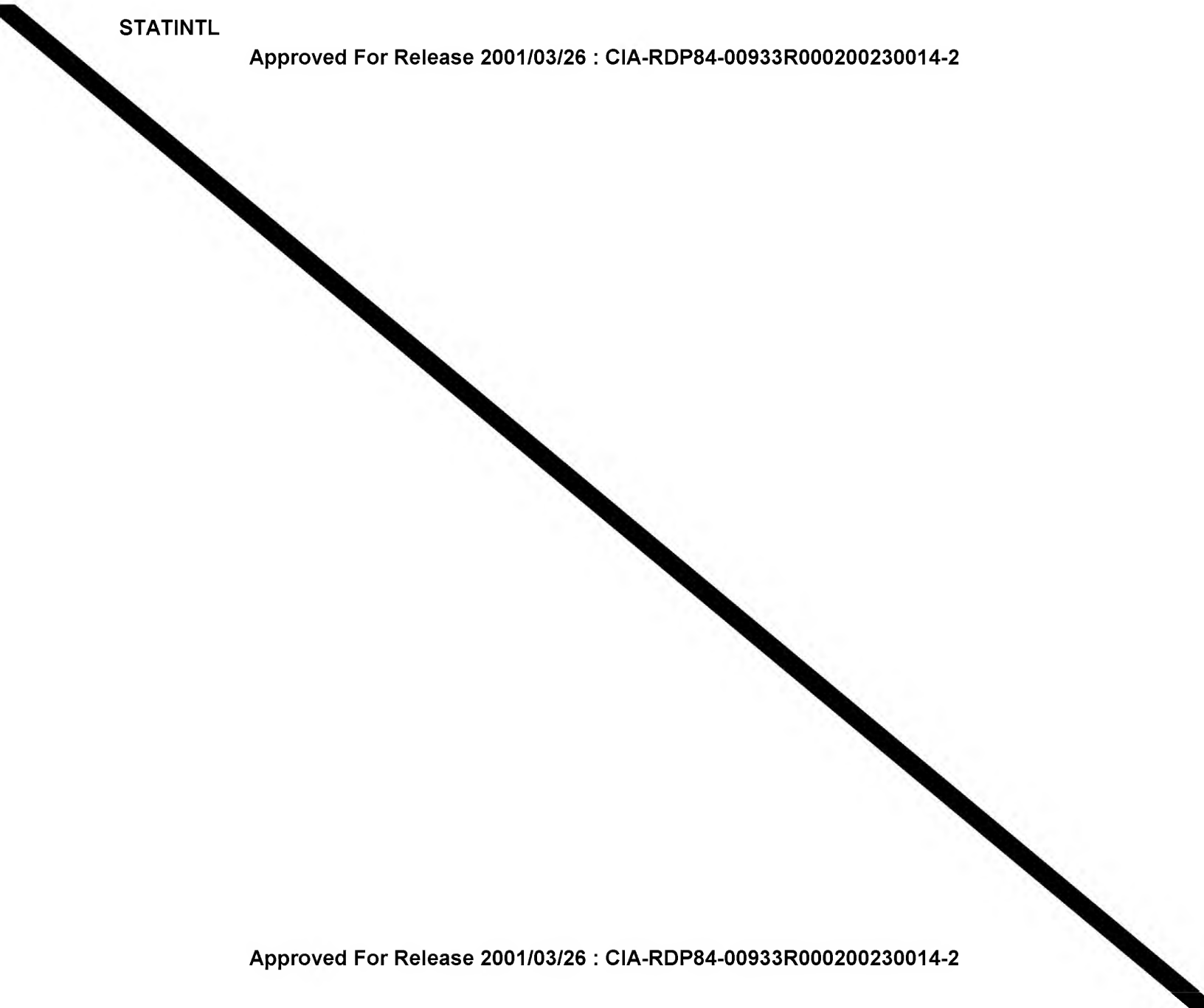
and,

Processing Dollars is estimated as:

ODP Budget $ - Applications Programming $ (in millions)

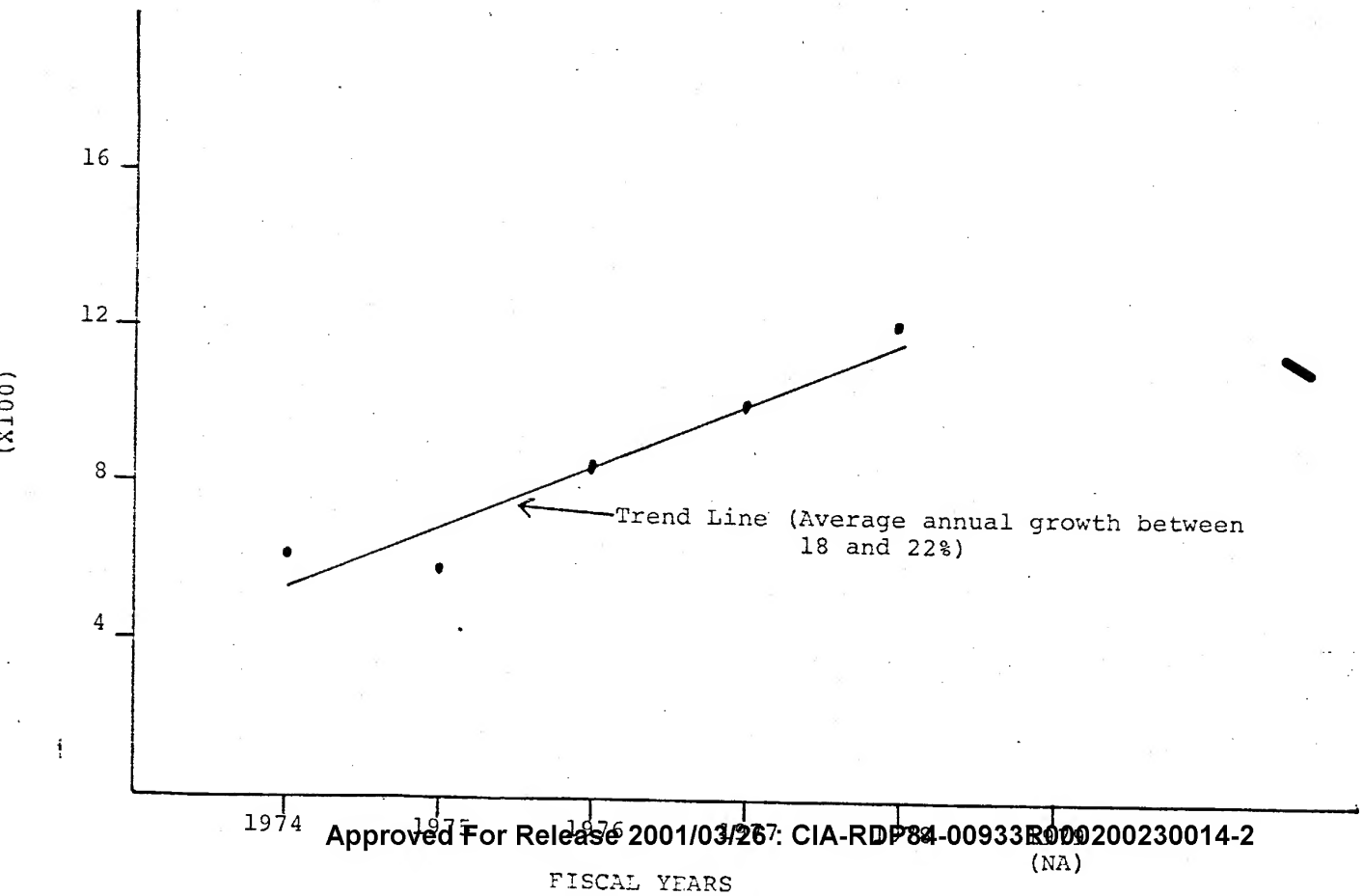
With Applications Programming $ derived from PAR Billable Manpower dollars (in millions).

The basic data are tabulated on the accompanying table. From 1974 to 1978 the increase in Processing Productivity (as defined herein) is 13.2% (1.06 to 1.20) for an average annual growth rate of 3%. If a trend line is fitted through the data the growth rate is approximately 7%. Therefore, the growth rate in Processing Productivity may be estimated as between 3 and 7% for the 1974 - 1978 period.



Approved For Release 2001/03/26 : CIA-RDP84-00933R000200230014-2

ODP Processing Productivity (Output/Staffer)*



17 May 1979

NOTE ON ODP PROCESSING PRODUCTIVITY CHART

(OUTPUT/STAFFER)

For the purpose of this chart, the following definitions were used:

Processing Productivity (output/staffer) is estimated as:

$$\frac{\text{Computer Service Output (in millions of units)}}{\text{Estimated Average Processing Staff}^*}$$

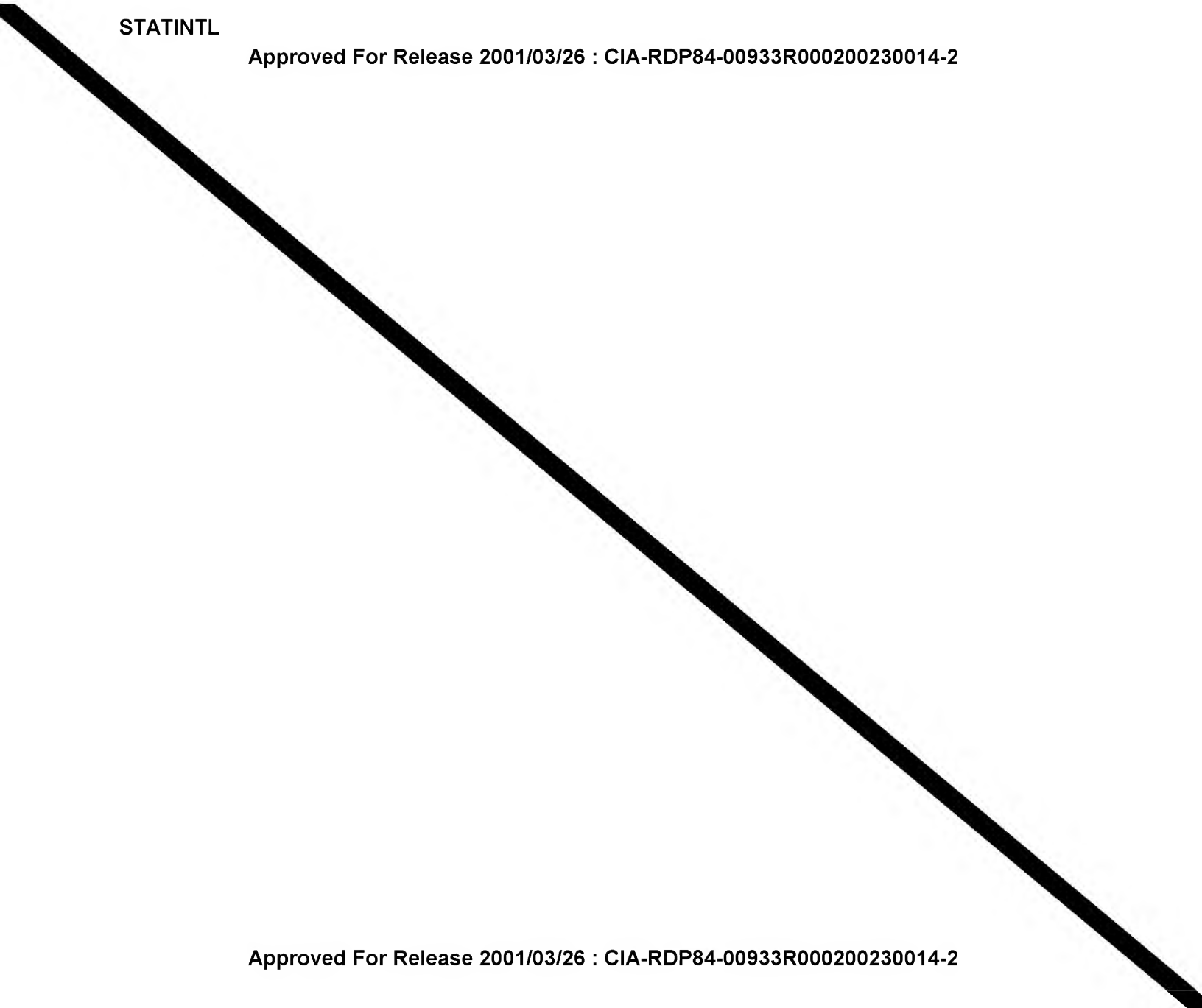
where,

Computer Service Output is measured by:

Project Activity Report (PAR) Units of Computer Service (in millions). (In the PAR referred to as millions of Billable Computer Service Dollars.)

From 1974 to 1978 the increase in Processing Productivity (as defined herein) is 98.3% (6.1 to 12.1) for an average annual growth rate of 18.7%. If a trend line is fitted to the data the growth rate is estimated as approximately 22%. Therefore, the growth rate in Processing Productivity may be estimated as between 18 and 22% for the 1974 - 1978 period.

*Includes ODP Front Office personnel



Approved For Release 2001/03/26 : CIA-RDP84-00933R000200230014-2

REVISED

2. Examples of new missions assigned, assumed or inherited by DDA Offices during the past five years with no increase in resources.

ODP Response

CAMS (COMIREX Automated Management System.) Seventeen staff personnel are now required to support project management and software.

TADS (Telemetry Analysis and Display System.) Two staff personnel are required to support project management and software.

STATINTL [redacted] (Community Support on Terrorism.) Two staff positions required.

NEDS/CEDS (NFAC Community Emigre and Defector Systems.) Two staff positions required.

MPS (Message Processing System - Support to the OC-ODP interface for the transmission of cable traffic.) Two people required.

STATSPEC [redacted]

Registry and Document Control Systems. The resources of two staff personnel are presently required to support this expanding area of support.

Information Handling Study. One person has been identified to participate in an Agency information handling study. It is anticipated that the individual will be on detail for a year or so.

3. Examples of problems identified in audit and task force studies which require additional resources to solve - but no resources were available or provided.

ODP Response

Control of TS/Codeword Output from the Ruffing Center and the Special Computer center.

Control of Secret and below information produced in the centers.

Implementation of ACF 2.

Increase ADP Security briefings and training for all systems users.

Development of tools to classify listings.

Development and implementation of a disaster plan.

Establishment of an ODP property accounting team.

Development of a mini computer support plan.

Conversion of a part-time position to a full time position for a technical security officer.

4. List of specific current R&D projects that are being pursued by S&T at the request of DDA Offices.

ODP Response

The following list may not be complete because ODP and S&T personnel familiar with the current R&D projects are on TDY this week.

Develop a provably secure operating system.

- The idea here is to take R&D efforts (e.g., KSOS, PSOS, Secure UNIX)* and determine their applicability to Agency computer systems, including network communications.

Develop a disc degausser.

- This project is at, or near, solution. NSA has just approved a high intensity magnetic device at Naval Research Laboratory for use. There is also some development work going on for a "wand" type degausser.

Develop techniques for classification markings for data.

- This request includes both external (e.g., automatically marking printouts) and internal (e.g., dataset identifiers) markings.

Determine information requirements for security audit trails.

Develop methods for secure man-machine interfaces.

Develop a secure database management system (DBMS).

Advanced Text Retrieval System

Systems Development Methodology

*KSOS - Kernelized Secure Operating System
PSOS - Provably Secure Operating System
UNIX - Bell Lab Trademark

REVISED

5. Examples of vital/critical programs that cannot be pursued because of constrained resources.

ODP Response

Insufficient staff resources have necessitated the acquisition of contractor personnel to properly support the following projects. The right hand column indicates the man years of support we currently require to support these systems.

PROJECT	MAN YEARS
CAMS	20
TRAJ	3
TADS	3
MPS	1
Signal Analysis	1
Document Tracking	1
Cartographic Support	1

It should also be noted that ODP always has more application development tasks than we can handle with the man power available. At the moment we have in process tasks representing an estimated 59 man-years of effort. Of the 59 man-years of effort, we estimate it will take 43 man-years to complete 153 tasks that are being worked on and an additional 16 man-years to complete another 42 tasks that have not been initiated to date. We have another 67 tasks that have not been sized and these, perhaps, represent our backlog. Last year we received 524 work requests.